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ABSTRACT

This document reviews the 1972 conference for new science department chairmen at private institutions held at Point Clear, Alabama, July 1972. Highlights of the conference include topics of the chairman and the administration; managing the finances and records of the department; seeking support from foundations; acquisition and use of surplus equipment; faculty creativity; faculty evaluation, tenure and promotion; student recruitment; the changing role of the department; and aides to the new chairman. A 40-item bibliography is included. (MJM)

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Notes on the 1972 Conference for New Science Department Chairmen at Private Institutions

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Notes on the 1972 Conference for New Science Department Chairmen at Private Institutions

Grand Hotel
Point Clear, Alabama
July 10 - 14, 1972

Sponsored by

RESEARCH CORPORATION
A Foundation for the Advancement of Science

405 Lexington Avenue
New York, N.Y. 10017

1972 Conference for

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FOREWORD

The chairman of an academic department holds a unique position, serving both as administrator and faculty member. It is a key post, one of the most powerful on the campus and one which can determine the fate of the department and influence the overall health of the institution.

Chairmen are often selected, however, on the basis of their superior performance as faculty members and on only their promise as administrators. They may take up their new jobs with little or no preparation, unaware of the implications of their new duties. Yet, starting almost immediately, the decisions they make can have critical and long-lasting consequences for their departments and their institutions.

In visiting and revisiting hundreds of colleges and universities over a quarter of a century, members of the Grants staff of Research Corporation had watched science departments suddenly come alive -- or start to fail -- with the advent of a new chairman. It seemed likely that some of the failures could have been averted if, somehow, the new heads could have been helped to grasp more quickly the full range

of responsibilities and opportunities in their new role.

It was toward this end that Research Corporation organized -- frankly as an experiment -- the first national conference for new science department chairmen in the summer of 1971. That meeting was built around the premise that a new head should benefit from intense exposure to and close association with more seasoned chairmen who had been conspicuously effective department heads, and with other recently appointed chairmen who were probably encountering some of the same problems as they took up their new jobs.

Participants in the first conference, limited to liberal arts colleges, were nominated by the presidents of 100 institutions suggested by the four Regional Grants Directors of Research Corporation from their knowledge of science departments in their geographic regions. Seventeen candidates were accepted, with the attempt being made to choose those who were young, active in both teaching and research, and strongly recommended by their presidents for their potential leadership qualities. In addition, a reasonable distribution by geographic area and scientific discipline was sought. The four resource leaders were chosen from nominations made by the Regional Grants Directors of the foundation on the basis of their distinguished records as leaders of science departments.

The results of the 1971 conference were sufficiently

promising -- both in terms of the participants' reactions and the observations of the foundation's Grants staff -- to warrant a second year of the experiment. In the summer of 1972 two similar conferences were held, one for private colleges and one for public, predominantly undergraduate colleges and universities, in the belief that the problems facing the two types of institutions were different enough to justify separate programs.

In 1972 the method of selecting participants and resource leaders was the same as that of the previous year. Unfortunately, the Program Consultant, Calvin A. VanderWerf, who had been a resource leader at the 1971 meeting and was scheduled in the same role at both meetings in 1972, was unable to be present at either. He was replaced by members of the foundation's Grants staff -- Sam C. Smith at the conference for private colleges and Kendall W. King at the meeting for public institutions.

Twenty new science department chairmen took part in the conference for public institutions held at Snowmass-at-Aspen, Colorado from June 26 to 30, and 16 were participants at the meeting for private colleges at Point Clear, Alabama from July 10 to 14. At both conferences the daily schedule was essentially the same as in 1971: morning and evening sessions,

with afternoons left free for rest, recreation or informal discussion.

The report which follows is that of the conference for private colleges; a similar report is available on the meeting for public institutions.

As was true of the "Notes on the 1971 Conference for New Science Department Chairmen," this report presents the highlights of the 1972 conference for private colleges in the informal tone of the meeting itself, with references to individuals or specific institutions being generalized or omitted. The comments reported are mainly those of the resource leaders, unless otherwise identified, and there are obviously some personal observations which may not be generally accepted.

However, there are in the following pages a number of ideas which have proved useful in practice; it is hoped that they may be of some assistance to new chairmen who are suddenly confronted by a whole new set of problems and challenges.

THE CHAIRMAN AND THE ADMINISTRATION

The department chairman is a part of the administration of the college as well as a member of the faculty, and he must learn to think and act in both roles. Certainly the department chairmanship is one of the most important positions in any college, a position which is perhaps even more important in small institutions than in large ones.

College presidents want and need the chairman's assistance. To render this help the chairman must reflect on the total college picture. The chairman who is able to do this will better be able to operate an effective department. At the same time, a lively department will undoubtedly have a lively chairman who is looking out for the interests of his department, and the saying, "as the chairman goes, so goes the department," appears to be appropriate. Thus the chairman also has very definite responsibilities to his department.

The department chairman must learn to work in an effective manner with the members of the administration and particularly with the academic dean since so many of the major decisions which must be reached by the department will have to meet with his approval. It is well to remember that the dean will probably be partial to the "wing-dinger," that is, to the chairman who is an effective salesman. The new chairman should learn to be such a salesman, to push the dean, to present to the dean the various wishes and needs of his department, and not expect the dean to do the pushing. The chairman should try to get the dean involved in the department's activities and should always be aware of selling him on what the department is doing. A good dean is one who will constantly be asking the chairman, "what is holding you and the department back; what is the administration not doing that is needed to get your department going?" The chairman should have already posed this question to himself and should be ready to present his answers to this question even when the question is not asked.

Working with Other Departments

One of the major tasks of the department chairman will be to stimulate effective relationships with other departments.

Science departments depend to a great extent on the efforts of others and it is in their best interests to see that such sister departments remain strong. Many times one department can lend considerable assistance in strengthening weaker departments. It may not be possible to work through the other department's chairman in such cases, since a weak department often has a weak chairman. This problem can often be overcome by dealing with someone in the department who possesses particular strengths which can be of assistance. The dean can also exert a great deal of pressure on the other department, if such pressure is needed, but the chairman must first convince him that a problem exists and that it is a problem which needs his assistance. Before going to the dean it is well to be sure that an impasse has in fact been reached; every attempt should first be made to settle departmental differences between chairmen or between interested individuals in the various departments.

In attempting to be effective the chairman may run into the roadblock of dealing with individuals whose personal interests are not in the best interest of the college. Frequently an individual department chairman may be forced to deal with another chairman who is overbearing in the emphasis he places on his own department. If interested in the overall

good of the college he must rise to this challenge and meet his colleague effectively. Such a challenge certainly cannot be overcome by taking the negative approach of shooting the other department down. Rather the effective chairman should take the initiative of seeing that his department is represented in all decisions that are made by the institution and also in seeing that these decisions are fair to the entire institution. These competitive conflicts between chairmen and between departments occur all too often and make more difficult the job of the chairman who is truly interested in the welfare of the college. The administration of the institution must always be alert to what is happening in these matters, be ready to encourage the chairmen and the departments which are being effective and productive, and see that other departments are encouraged to match these efforts, not hinder them.

Liberal arts colleges cannot afford the departmental civil wars which often occurred in the past, and the cessation of such activities will depend to a great extent on the guidance of the individual chairman. The department chairman should always consider the overall view of the college; he can no longer take strictly the side of his department alone. One of the real challenges of the chairman is to convince the

members of the department to take this bigger view.

Many of the difficulties which arise between departments revolve around the problem of communications. This may also be a problem within the department. When a particular problem reaches the point of being almost insurmountable it may be time to get the groups concerned together so that they can talk freely about their differences. Many times the most effective way to stimulate such conversation involves marriage of the formal meeting and a social hour. The tougher the problem involved the greater the need for informality.

Selection of the Chairman

Since the department chairman is a member of the administration, the administration should have some input in his selection. The actual methods being used vary rather significantly from institution to institution, representing, at one extreme, election of the chairman solely by the members of the department to, at the other end of the spectrum, the appointment of the chairman by the president without consultation with the department. The most effective method would appear to be someplace between these two extremes. If the department chairman is to have the cooperation of the members of his department, he must have their confidence; this seems

to imply that they should have some say in his selection. By the same token, a department chairman who cannot work effectively with the members of the administration will almost certainly not be able to represent his department in the major decisions of the institution; thus the administration should have a voice in the selection of the chairman.

One element of the selection process which is often overlooked is the fact that the individual department chairman will have to work with other departments and, therefore, must also have the confidence of the individuals represented by these departments. This seems to suggest that other departments, particularly those in the same division, should have some input in the final selection of the department chairman.

The department chairman's job should not be a tenured position. The department chairmanship is something which must be experienced and should be experienced only as long as the individual can serve in the capacity constructively and with satisfaction. But there is a time when each individual should leave this position for his own sake and for the good of the college.

Regardless of how the chairman is selected, regardless of which of the many different modes of action are most effective for him, and regardless of the size of the department,

the overall interests of the institution require that each department chairman make an effective contribution to the total college program.

MANAGING THE FINANCES AND RECORDS OF THE DEPARTMENT

Record keeping and the search for funds to support the department may appear to be among the more mundane activities involved in the department chairmanship but they represent two of the office's most important and compelling duties.

Effective departments usually have a firm basic budget and work within it. Such a budget is absolutely essential as a start for effective planning for it establishes the minimum program. Good records should be kept from year to year by the department chairman so that it can be determined where cuts can be made when needed with a minimum of disturbance. Historical records of the department's financial activities will also greatly assist the chairman in his requests for funds through the college as well as through outside agencies.

The budget must be flexible enough to allow changes to

be made when needed and to be amenable to the use of outside funds for extra things which may crop up throughout the year. The budget which is submitted for approval to the appropriate financial officer or committee at the beginning of the year must be an honestly prepared budget capable of being defended. Once the decision has been made on the amount of money which will be available to the department, it is the responsibility of the department chairman to see that this is spent in the most advantageous manner. At the same time it should be remembered that the administration doesn't give laurels for returning money not used! A well-run college budgets so much money to be used by each department and expects the department to be constructive in the use of this money. Once the budget is prepared and has been agreed upon it is expected that the money will be used, and used effectively.

In times of short supply of available funds each department chairman must be able to defend the department's needs and be aggressive in demonstrating that the program is a going one. To some extent he must be a good propagandist, but also he must be familiar with the overall situation. In order to demonstrate the needs of the department effectively, the chairman must not only have records of the past history of expenditures of the department but he will also find it useful

to have a list of the graduates of the department and information on how the department contributed to their success. The chairman must have available data which will demonstrate the prestige and influence of the department, even those items which will not require funding.

But eventually the department chairman will find that the college is simply not able to support the department's budget at the level needed to run the best department program that staff and facilities would otherwise allow, and thus will have to turn to outside sources of support. In deciding on the cuts to be made in the budget the chairman should decide which items in the budget are most likely to receive support from outside sources and can, therefore, be deleted from the budget most safely.

Outside support may come from a variety of sources including government and foundation aid, as well as assistance from individual donors and industries.

Working with the Development Office

The search for outside financial support requires that the department chairman associate himself with the development officer of the college. It is well to bear in mind that the goals of the development office are usually much

broader than those of any individual department. Thus the development office may have primary interest in looking for the "BIG" gift whereas, relatively speaking, the individual department chairman is looking for a "dribble." But if the proper relationship is built up between the development officer and the department chairman, effective financial recruiting is possible.

It is of utmost importance for the chairman to realize that he cannot depend solely upon the development officer to raise the needed money for the department; the development officer is simply not familiar enough with the needs of the department or with the details of the individual discipline involved to be able to write and present an effective appeal for funds; this will have to be the responsibility of the members of the academic department. The development officer can, however, be of assistance in locating prospective donors, in familiarizing the department with the special interests of these prospective donors, and in providing the support necessary for the faculty member to visit personally the prospective donor when this seems appropriate.

In order to get this kind of cooperation from the development officer or other officer of the college it is necessary that the department chairman convince this individual that he

and his department are friends, not enemies. The development officer must trust them and must be convinced that they are qualified to present a case in an effective manner. He must be kept informed of the department's activities as well as its needs and desires.

One effective method of acquainting the development officer with these activities is to invite him to some of the departmental meetings or, perhaps, to meetings specifically set up for the purpose of acquainting him with the department. This will provide an opportunity to acquaint him not only with the faculty members and students, but with the strengths and weaknesses of the department's offerings, particularly as they relate to needed funds.

Organizing an Effective Approach

Once the decision has been made to approach an outside donor for funds, the department chairman must be responsible for organizing an effective approach. Such an approach should be geared to the special interests of the potential donor, and this requires that the chairman be familiar with the interests of the individual or the company involved. The proposal must be well documented, and this requires careful record keeping on the part of the department chairman. The donor will be

interested in knowing what impact his gift may have on the institution, and a thorough presentation of these facts will be a factor in the decision he reaches. This means that the individual presenting the appeal to the donor must be intimately familiar with the case being presented. The approach taken must be positive, one operating from strength. "Poor mouthing" the home institution or pointing out its deficiencies is not an effective appeal for money; rather, it is best to lead from strength and to make a presentation on the basis of assisting an organization in doing an even better job than can be done without the donor's money.

When approaching an industrial organization for support it is normally best not to start with top management personnel unless they are well known to the person making the approach. Rather, one should look first to individuals at the middle management level. Generally, they are the individuals who are most easily interested in the educational institution and they know how and through whom funds can be sought and whether surplus equipment might be made available.

One approach to interesting industrial personnel in becoming active in support of an institution involves formation of a counselors' group made up partially of alumni, but more particularly of middle management people interested in educa-

tional institutions. Such a group can give valuable assistance to the department in curriculum and research matters and can serve a valuable function in job placement as well as being an effective introduction to the upper levels of management in the company.

In addition to support from industry, individuals and small groups may be induced to support the activities of the department because of their special interest. Every effort should be made to acquaint such interested individuals and groups with the program of the department and with its needs.

This may take the form of some kind of organized tour service when outsiders happen to visit the building. Any individual or group interested enough to visit the campus should be made familiar with the faculty and the students as well as with the goals and the needs of the department. The extra effort spent with such visitors may yield rich rewards.

The department chairman must be personally responsible for seeing to it that any assistance given the department is recognized in the proper fashion. Suitable publicity, where appropriate, is in order, but a personal "Thank You," where it can be given, and a follow-up letter on the use of any funds or other assistance is simple and even more appropriate. Such expressions of appreciation also should help the chairman

in future fund raising activities.

In appealing for support from outside agencies it is well to remember that education interests come and go and that what is fashionable at one time may not be fashionable at another. A fund raiser should not look down his nose at these interests; neither should he cater to them excessively. Rather, in making a request for support, when it can honestly be done, it is wise to point out past experience in the areas which are in vogue and the relationship of the department's activities to these areas of special interest. Such interests at the present time might include environmental science, public understanding of science, and the training of women and of blacks.

"Selling" the Administration

In summary, it is obvious that the major support for the department will continue to come from the college, and the chairman must always be conscious of keeping the administration up to date with the department's activities and its aspirations. The academic dean expects the department chairman to fight for his department's needs, but he also expects him to back up those needs with solid facts. The approach, "we deserve more money because department X got more last

year," is bound to be ineffective; the positive approach is the only one which will work.

The chairman must always have at hand information describing accurately his department, including such items as number of students graduated, their roles after graduation, funds obtained by the department and how they were spent, and the impact of the department on the overall program of the college. This information can be developed only if extensive records of department activities are kept.

It is advisable that everything be kept in writing, even to the extent of making written notations of agreements reached by phone, stipulating the terms agreed upon. In the case of such oral agreements, it is wise to send a copy of what was agreed upon to the other party for future reference.

Many times the department can add to its effectiveness without increasing substantially the cost to the college. For example, one biology department made its facilities and equipment available to a distinguished academician who retired from a major university but was still interested in remaining active in research. The spade work for this arrangement was done several years before, and the researcher brought with her to the new campus, in addition to a sizable amount of specialized equipment, her own grant support. The total annual cost to the

college has been in the neighborhood of $500, and for this modest investment it has obtained the advantage of a superior researcher capable of inspiring and training its students, as well as offering consultation services to other members of the faculty. In addition, the college has had the benefit of some 15 international scholars who have stopped by the campus in order to confer with this individual and who have, at the same time, been available to interact with students. Her presence on the campus has attracted both support and publicity for the department.

The college president spends most of his time representing his college to special and general audiences. He wants the representation to be positive. In order for him to make it so, the department chairman must keep him informed. This should be done at frequent intervals in writing, not verbally, and should be succinct. The department chairman should not be reluctant to "toot the department's horn" (on an honest note, of course) since this is the kind of information which will be of greatest assistance to the president.

SEEKING SUPPORT FROM FOUNDATIONS

Private Foundations

Foundations concerned with the principal objectives of colleges are not charitable organizations; they are investment companies seeking the best opportunities for placement of their funds. At the present time, as at all times, there is more money which could be made available than there are outstanding ideas. But, there is not now, nor has there ever been, enough money to do all of the things people would like to do.

In preparing a proposal for submission to a foundation care must be taken to see that the proposal fits into the overall goals and philosophy of the college and that these are made clear to the organization being approached. All too often the language of "college catalogese" serves only to obscure.

The following quotation from Robert Ruark's book "The Old Man and the Boy"[1] should prove useful to every department chairman:

> "I ain't shooting much these days," the Old Man said. "You'd better do it for me. Take my gun, and walk in past Pete now. Walk gentle, kick up the birds without making the dog nervous, and let's us see can you get one bird. Don't worry about the second bird. Just concentrate on the first one. You got to kill the first one before you can shoot the second one. It's what we call a rule of thumb. Suppose you try it to see if it works."
>
> I walked in past Pete, and the birds came up like rockets on the Fourth, and I did what most people do at first. I shot at all of them, all at the same time. I fired both barrels and nothing dropped. At all.
>
> I looked at the Old Man, and he looked back at me, kind of sorrowful. He shook his head, reached for his pipe, and made a great to-do about tamping down the tobacco and lighting it with a kitchen match.

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1. "The Old Man and the Boy," Ruark, R., Holt, Rinehart & Winston, Inc., 1953.

"Son," he said, "I missed a lot of birds in my time, and will miss some more if I shoot at enough of them. But there is one thing I know that you might as well learn now. Nobody can kill the whole covey -- not even if they shoot the birds on the ground running down a row in a cornfield. You got to shoot them one at a time."

So, it is essential that the college establish priorities and that the various levels of administration, including the department chairman as well as his department, understand these.

It is always best to deal from strength. Put the cane and tin cup away. Use the rifle approach, not that of the shotgun. Be sure that the approach is consonant with the purposes of the foundation. Important points which should be obvious in a proposal include:

- What is available locally. Show that the institution is behind the proposal. There is almost always some local support available, whether it be just available space or equipment or some monetary assistance.
- Know the available sources of support. "The

Foundation Directory"[2] lists approximately 5000 foundations, by states where incorporated and also according to fields of interest. The Foundation Center also operates eight regional libraries which will make available, at no cost, information on the various sources of support.

Having enunciated goals and having identified prospective donors, what next? If you have something to say, just say it -- but do it in a very straightforward and positive manner. Find out how a particular organization wants to be approached and try to conform to these wishes. It is of utmost importance that the special interests of the organization being approached be known before making contact with it.

It is also important that the person making the proposal to the foundation be intimately familiar with the requirements of the particular situation. This usually dictates that a member of the department, rather than a development officer, be the one to make the approach. If a personal visit to the foundation office is planned, it is advisable, at the time the appointment is made, to present the foundation officer

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2. "The Foundation Directory," prepared by The Foundation Center and distributed by Columbia University Press, New York, Edition 4, 1971.

in writing a preliminary version of the proposal which you hope to submit. This will give him an opportunity to become acquainted with the salient points prior to the time of the conference.

Company Foundations

A number of industrial concerns operate company foundations which are not dissimilar in many ways to the private foundations. Foremost in the minds of the corporate officer at the time he is considering a request for funds is the question "why should we support this activity?" This officer ultimately will have to explain to someone, a company official or stockholder, the reasons for the decisions he makes. In these activities corporations, like foundations, are not charitable organizations; their gifts must be consistent with the goals of the corporation.

There are a number of reasons why corporations support certain educational institutions including:

- They are impressed by the educational excellence and the academic quality of the institution.
- They recognize the importance of certain institutions for recruiting purposes.
- They recognize the value of community relationships.

The effective department chairman should understand these special interests and be able to relate to them. Relative to the undergraduate institution he must bear in mind that corporations, particularly with research orientation, will be hiring primarily from the Ph.D. ranks and the baccalaureate origin of the student may become lost if he does not make a conscious effort to familiarize the appropriate corporation officers with the facts. At the same time, he must always be conscious of ways of relating the academic interests of his institution to the community interests of local industrial concerns.

Liberal arts colleges are important to American industry since these institutions represent one of the major sources of students who go on for advanced degrees. To a large extent the strength of the Ph.D. candidate and, therefore, the future employee of the company, is determined by the quality of the undergraduate institution. It can be asserted fairly that funds given to strengthen undergraduate education are of importance to the welfare of industrial concerns.

One source of information on company giving is available from the Council for Financial Aid to Education, a not-for-profit foundation set up to stimulate corporate giving to education. This organization provides information to corporations

concerning educational institutions, as well as information to colleges on such corporations. One of its useful publications is the "Case Book" which lists in tabular form corporations that make contributions for various purposes and the form of the contribution given.

Company foundations can only be effective in their role of supporting educational institutions if they are informed of what is happening in these various institutions. The administrators in charge of such programs are always in search of information and looking for leaders in the various fields. They welcome correspondence from department chairmen, particularly those containing information on the general institutional goals relative to science and how the activities of the college contribute to these goals. They are also looking for information on what is needed to assist the department in meeting these goals. The best person to make such information available is the department chairman.

ACQUISITION AND USE OF SURPLUS EQUIPMENT

State Surplus Centers

Each state operates a state surplus center which acquires surplus equipment from the federal government each month at approximately the beginning of the month. Normally, in order to acquire equipment from such centers it is necessary to have a letter of authorization from the president of the college each time equipment is acquired. It is often convenient for the president to have such letters prepared in advance so that on demand the individual faculty member can simply fill in the appropriate date and his name. It should be kept in mind by the administration of the college, however, that not more than one order can be filled by any one institution for every thirty day period.

The acquisition centers are arranged with a display area which lists the stock numbers of the various items available, the name of the item and its location in the warehouse. The

individual interested in acquiring such equipment should note on the order form this information and then proceed to the warehouse area to examine the item before placing the order.

One experienced user of surplus equipment has formulated the following golden rules:

- To win it is necessary to go to the center every month or as often as possible.
- Don't give a man's responsibility to a boy. The buildings and grounds men cannot do the job of acquiring surplus equipment for the science departments. Each department must send a representative and he must be a creative individual with imagination.
- Get to know personally the directors and the screeners in the state surplus center. Be sure they have your interests and needs well in mind. This means that you must educate them to what you can use and what you need.
- Reserve enough time to go through the center with ease two or three times each visit.
- If you need a specific item, but can't find it, ask the director to see if a state transfer is possible.

- Open up the various items to see what is inside. Many times such an examination of a "black box" can reveal items of extreme value to an institution.
- Take some of the department's majors along on such visits. This is good training for them and they can help in the search. Such students are often quite innovative, particularly with regard to items of pedagogical value.

Other Surplus Programs

Another program which should be of interest to liberal arts colleges is the Excess Properties Program. This is property which becomes available before it goes to the surplus centers. To be eligible for acquisition of such materials the institution must hold certain kinds of government grants and the equipment must be used in conjunction with a particular project. There is some question on this latter qualification and some flexibility may be possible.

Certain priorities are given to the acquisition of excess property, with first priority going to branches of the armed service and second priority to other branches of the government. Interestingly enough, this latter category includes the National

Science Foundation and, by definition, colleges are considered agencies of the NSF if funded by that organization. The third priority includes other colleges.

In acquiring this excess property equipment a department chairman should scan the catalog supplied by the federal agency as soon as it is received and immediately call to put a freeze order on all items desired. Once this is done the actual paper work involved may take up to six weeks.

A new project which has just been initiated by the federal government is entitled Project Home Run. This is a program dealing with items returned from overseas and will include, in addition to items such as included in the Excess Property Program, major items such as buses, ambulances, trucks and fire engines. The institution acquiring such equipment will pay a fee comparable to the cost of returning the equipment from overseas. To be eligible to acquire such equipment it is necessary to have an official form with a statement of justification for the use of the property. The Project Home Run items are mostly large items and may be of less interest to departmental research than the items available through the Excess Property Program.

Machinists' Services Needed

Surplus property acquired by any of the above means usually requires certain adaptations. Students can be used to real advantage in adapting equipment and the experience they will gain can make the work academically sound. At the same time, it is often necessary to have the services of an experienced machinist to make really good use of these resources. (It was of interest that approximately half of the institutions represented in the conference had such experienced help available to them.) Such help has been acquired through a variety of different means including:

- Combining the needs of several departments to justify the salary of the experienced machinist. Grant support may be obtained through this mechanism. Experience has shown that the existence of such a man on the campus speeds up several programs at the college and will be of assistance to the wide variety of science departments.
- In many communities retired machinists are available who are interested in part-time employment and can be utilized by academic institutions at minimum cost.

- It is possible to use part-time machinists, those employed elsewhere, on an evening or weekend basis.
- A search of alumni records may reveal someone with personal interest in the institution who can make available an industrial machine shop which can lend its services to the academic institution.

Industrial Surplus

In addition to government surplus properties, a wise department chairman will keep current on the availability of industrial surplus. Often it is possible to find out when a project is being terminated and acquire usable equipment from a company. Here again a counselors' group of industrial representatives, as described in an earlier chapter, may be useful for learning about such equipment.

There are some formal industrial surplus programs, including the Western Electric College Gift Program and one associated with Texas Instruments Company. The former company also has a college grants program available for equipment purchases. Other industries such as Dow and General Electric have been known to make such equipment grants in

previous years. Many companies prefer to make these gifts on a local basis, but the name of the game is "communications" -- the effective department is one that makes its needs known and is constantly in search of fulfilling these needs.

It may be necessary for the department chairman to work through the development office in the acquisition of such equipment and the development officer should serve as a focal point for information on the availability of such programs. It will be necessary for the department chairman, however, to describe clearly his department's needs and uses of any equipment which is to be acquired from industrial sources. In writing such a proposal the donor must be convinced that the equipment really will be used effectively and that the program is scientifically and academically sound.

FACULTY CREATIVITY

The easiest method for achieving a creative faculty is to hire one. Unfortunately, the present situation, while favorable in regard to availability, dictates that few colleges will be able to enhance the creativity of their faculty through this means.

However, when given the opportunity to add to the department, the chairman should make every effort to see that the person hired is both creative and willing and able to adjust to the requirements and expectations of the institution. In earlier times it seemed that an institution wished merely to make reasonably certain that the man to be hired was alive and that, hopefully, he had an independent income. At the present time, due to the large number of excellent candidates available, a college can -- if it is willing to put forth the effort -- hire individuals with first-rate

credentials.

One method of acquiring the names of suitable candidates for teaching positions which seems to work well for small institutions, both in terms of efficiency and in selectivity, is the personal inquiry directed to individuals who are in the best positions to know of available candidates for a position. In this method university faculty members in Ph.D.-producing institutions, and especially those well acquainted with undergraduate teaching, as well as with the institution under question, are asked to nominate candidates. This serves as a positive selection procedure since the individual doing the nominating will be selective in order to protect his reputation.

Widespread advertising of available positions has a disadvantage at the present time due to the large volume of correspondence which will be generated by the surplus of candidates for academic positions. At the same time, open advertising does have the distinct advantage of stimulating applications from candidates outside the institution's region as well as offering the opportunity of finding a "diamond in the rough," a candidate who would not come to the attention of the institution by other means.

The Final Selection

A campus visit by the top candidates for a teaching position is extremely important. The small sum required for such visits can save thousands of dollars, as well as countless headaches and the rectification of errors later. During these interviews the chairman and the selection committee should be looking for enthusiasm on the part of the candidate, and for evidence of appreciation of teaching opportunities in the institution. The candidate who has not weighed the advantages and disadvantages may soon wind up as a liability. Certainly, it is necessary for the department chairman to describe to the candidate candidly the limitations and opportunities within the institution. This should be done in such a way as to not downgrade the department, but rather to state the facts. The occasion of the campus interview is also the time to examine the candidate's attitude toward research and other topics which may be of particular concern to the department.

The selection procedure will be greatly assisted if the candidate is encouraged to present a paper or to teach a course during his visit. This will give both faculty and students an opportunity to observe him in action.

Various segments of the college community should be involved in the final selection procedure, including all of the

members of the department in the case of a small institution and members of other academic departments as well as the administration and a representative group of students. The student input in the selection procedure can be valuable and can serve as a part of their educational experience. In using students in this role it is advantageous to give them specific assignments, such as forming an impression of the teaching potential or of the social acceptability of the candidate. Many times it has been found that the candidate will reveal to students things which will not be evident or revealed to faculty.

The final selection procedure differs from institution to institution and there seems to be no best way. Some schools find that a hiring committee including members of related departments works well. At other institutions it has been found that all members of the department serve as an effective committee and that impressions of other department chairmen can be obtained informally. The department chairman should, of course, play a major role in the final selection since he is the one who will have to work most closely with the new faculty member and will not only share in his accomplishments, but will also suffer through his mistakes.

In many colleges today the problem of stimulating faculty

creativity is more important than that of hiring. In the case of science departments, one of the principal measures of faculty creativity involves research participation, with research being taken in its broadest context to include, in addition to fundamental work, pedagogical research and laboratory and lecture demonstrations. One method of stimulating faculty creativity is to require such efforts and allow released time from teaching duties. However, this may be difficult during the present condition of limited financial resources. The department chairman must then turn to other avenues of assistance.

Use of Industry and Government Scientists

Such assistance may be obtained through the use of professionally-trained individuals employed by local industry. Many industrial scientists would like to have the opportunity to do some teaching and this may offer an economical means of gaining released time. Such persons may also make a real input in the offerings of the department, but when so employed it must be made clear to them that they have to play according to the school's rules. Experience has shown that released time can be gained through this mechanism for between $500 to $1,000 per term.

Another method of acquiring released time involves the use of government personnel made available by the Intergovernment Personnel Act of 1970, sometimes called the Mobility Act.[1] According to this act, personnel can be exchanged between government agencies when one agency has need for persons with particular training and another agency has such individuals available. Interestingly enough, "intergovernment agency" is defined so as to include institutions of higher education. The government will continue to pay the entire salary of the individual with the second "agency" many times being responsible only for transportation expenses incurred. Such use of government personnel may be on a full-time or part-time basis and may be for up to a two-year period. The employment may be classified as Assignment on Detail, where the employee continues to work at the home institution but visits the "agency" involved in the exchange on an assignment basis. In addition to such part-time assignments there may be an Assignment on Leave, in which case the employee is permanently assigned to the new institution and may actually reside on the campus. Government employees involved in such intergovernment exchanges continue

1. Bureau of Intergovernmental Personnel Programs, U.S.Civil Service Commission, 1900 E Street, N.W., Washington, D.C.

to accrue their civil service points so that it is no disadvantage to them.

In any case, whether the part-time employee is industry- or government-employed, the college should use him to greatest advantage and this probably does not mean teaching general courses. Rather, it is often wise to use such help in teaching courses in the area of special expertise of the individual. By doing this the college not only can acquire some released time for its regular faculty but can also offer, on a limited basis, certain specialized courses.

Another institution-government cooperative arrangement is exemplified by the NASA-Ames Consortium. This arrangement was instituted at the government laboratory's initiative in order to keep its people active and alert, but it has had definite positive values for the academic institutions involved. In this program, investigators at the colleges are able to participate in research at the Ames Laboratory, working on projects, perhaps of their own initiative, in close cooperation with the NASA scientists. The academic investigator must first write a mini-proposal describing the research he wants to do and this is reviewed by the lab's personnel. Often these proposals are written under the close tutelage of one of the scientists at the laboratory who is interested in

having a faculty member work with him. Grants are then made from the available funds not to exceed $10,000, including salaries for faculty and students, as well as supplies. The program has several advantages to the academic institution including providing summer employment for faculty. But more important, it helps the faculty members to get back into active research participation through their association with the scientists at the government installation. Many of these projects have been so successful that they have resulted in regular grants from NASA, or other organizations.

It should be noted that such a cooperative program does not relieve the college of responsibility of having active research on the campus but rather serves to extend the research opportunities available as well as serving as a catalyst to assist faculty members in getting back into the swing of research.

FACULTY EVALUATION, TENURE AND PROMOTION

There are several basic assumptions which must be made relative to the evaluation of faculty including:

- That of accountability -- to the department, the school, the faculty and the students. Certainly faculty must be held accountable to the entire institution.
- That evaluation of faculty should be on a merit basis.
- That the evaluation will be done either in an organized, formal fashion, or by some informal means which expresses the opinions of students or of faculty.
- That every system of evaluation can be improved.
- That the attitude during the evaluation should be more than one of assessment. The purpose of

the evaluation should be for self-development and renewal.

A basic premise in all faculty evaluations should be that it is impossible to calculate the impact of a faculty member solely in terms of the number of hours involved in activities, whether they be teaching or doing research. There is a need for an individualized approach to evaluation and the need for a wide variety of categories of ways each faculty member makes his contribution to the overall program of the institution.

A number of categories of responsibility have been suggested, including:

- Classroom teaching.
- Advising.
- Faculty service and relations.
- Administration relationships.
- Professional services.
- Public services.

There is some question as to how each of these fits into the principles of a liberal arts college and all certainly cannot be weighed equally. Each institution must decide on its goals and functions and evaluate its faculty accordingly.

Several instruments are available which may be of assist-

ance to a department chairman in measuring these goals, including:

- The Educational Testing Services -- The Institutional Functioning Inventory. This program is administered to faculties, administrations and students, and surveys what each group thinks the institution's goals, activities, and so forth are. The data are then computerized and graphed.
- An institutionalized goals inventory.
- Student evaluation forms.

One important criterion in evaluation of faculty should be the teacher's effectiveness, that is, the impact of the teacher on the life of the students. Sources which will yield information on this effectiveness include opinions of the deans, chairmen, students and alumni groups.

In measuring these it should always be borne in mind that there are different approaches to the teaching process, including the stimulative and imaginative approach, the gentlemanly and scholarly approach, the friendly and informal approach, or combinations of the above. There is no way to determine which of these may be the best approach, and in the evaluation procedure each individual case must be considered

separately.

There are several constants which can be expected of every faculty member:

- Professional competence.
- Personal interest in students.
- Fairness.
- A positive attitude.

Some approaches to assessment which have been effective and which should be included in some form in any formal evaluation program include:

- Student evaluations.
- Classroom visits.
- Examination of teaching materials used.
- Special incidents.
- Self evaluation.

Department chairmen are in the position of giving leadership to their departments and the procedure used in evaluating the faculty will be extremely important in the success achieved. In accomplishing the changes suggested by the evaluation the needs and frustrations of every individual faculty member must be considered, and in attempting to stimulate change you must be mindful of the various roles that the department must play and not attempt to make each faculty member conform to the

same general mold.

It is also important that each faculty member understand how he will be evaluated and what weight will be given to various factors. It is advantageous to have this in writing and to review it with the faculty periodically.

Granting of Tenure

The question of the criteria for granting tenure is always a difficult one. (The general consensus of the group seemed to be that tenure arrangements probably will not be changed in the very near future, so department chairmen must learn to work with the system as effectively as possible.) In making decisions relative to the granting of tenure, both the past performance of the applicant and his anticipated activities in the future should be considered. Tenure should not be granted strictly on the basis of the former since it should not be just an award for past performance. If there is reasonable doubt about an individual's potential for creative faculty activities, this individual probably should not be rehired and certainly should not be granted tenure. Only those individuals who have demonstrated the potential for really effective teaching should ever be given tenure. Assessments of the future effectiveness and creativity of a

faculty member should be made as early in his career as possible; as soon as a department chairman feels confident that a faculty member should not be granted tenure, the faculty member should be released regardless of whether this is after one, two or six years. The primary responsibility of the department chairman is to the institution rather than to the faculty member, since the future of the department, as well as the institution, rests in the faculty members and their productivity.

Relative to the deliberations of the tenure committee, or of whatever other mechanism is responsible for making this decision, it may be a useful exercise to examine each untenured faculty member each year and raise the question, "If this was the year we had to make a decision as to tenure of this individual would we grant it?" If the answer is no, or perhaps even maybe, this may be the time either to release the individual or to notify him that his future employment at the institution is somewhat questionable. The individual should be told why this decision is being made.

Forms for Evaluation

No one ideal form for use in the evaluation of faculty members exists, since each institution will wish to stress

certain things differently, but one approach is exemplified by the "sociometric" approach being used at one of the institutions represented at this conference. In this approach students complete a one-page form in which they are asked to identify the following:

- The three faculty members who have the greatest influence on the campus.
- The three faculty members the student is most likely to recommend.
- The three faculty members the student is least likely to recommend.
- The three courses the student would recommend most highly.
- The three courses the student would recommend least highly.

The information is collated and distributed to the faculty members concerned, but not to others.

In addition to completing the form, the interview team responsible for the sociometric approach taped an interview with selected students on their comments as to why they selected or rejected various faculty members in this poll, and these data were made available, in the form of a computer print-out, to the various faculty members. On this print-out

each faculty member was able to identify himself but not the others involved. Faculty members then completed an evaluation form in response to this student evaluation.

Conferring with Faculty on Evaluations

Once an evaluation has been made, the appropriate portions of the information obtained should be made available to the faculty members. This means that the department chairman must be prepared for conferences with the members of his faculty, many of whom may initially be disturbed about their ratings. The long-term success of the evaluation will depend to a great extent on how the chairman conducts these conferences. Although each individual must develop his own particular modus operandi, certain safeguards should be included in order to assure success in the conference. These might include such as the following:

- Allow the person being interviewed to "ventilate" his feelings. The chairman must be ready to be a good listener.
- When the interviewee has completed this process, ask him to restate the problem for further consideration.
- Get the basis of fact, the evidence as seen

by the person being interviewed.

- Control the environment by having the arrangements for the conference as conducive to a constructive meeting as possible. Items to be noted are that the chairman should not be seated behind a desk and probably should be careful to see that he is not seated lower than the faculty member being interviewed. These factors may have an important psychological effect on the direction the interview takes.
- Control the timing, both the chairman's and the faculty member's, to guarantee to as great an extent as possible restraint on the part of both. Many times it is advantageous when asking for an appointment for such a conference, to suggest a luncheon date.
- Restraint must be assured. If a conference reaches a point in which restraint is not possible, it is probably best to postpone the meeting to a later time.
- Respond with genuine concern when a solution does present itself.

- If the chairman is taking the initiative of scheduling such an appointment with one of his subordinates, it is best to go see this person in his office rather than calling him into the chairman's.
- When calling a member of the faculty in for a conference, be sure to notify him of the subject to be discussed in as much detail as possible at the time the appointment is made so that he can prepare himself.

In all such conferences try to get the faculty member to come up with a decision or a solution to the problem. If the solution is not satisfactory from your viewpoint continue the conference until a more satisfactory solution does appear.

STUDENT RECRUITMENT

The three basic assumptions relative to student recruitment as it pertains to the needs of the science department might be summarized as follows:

- There is a need for students.
- There is a need for competent students.
- There is a need for a critical mass of students.

It may be fair to say that we should ignore the question, "Should we train scientists?" It may be morally wrong to discourage the bright young student interested in science based on an individual's evaluation of what will happen to the profession nine years from now. Studies of projected needs for scientists, as well as other professions, are of some assistance to faculty members in advising students, particularly those with a degree of uncertainty about their interests. There will always be a need for top-flight scientists, and

those students demonstrating the interests and the ability to develop in that direction should definitely be encouraged.

Working with the Admissions Office

At the present time it is necessary that science departments play an especially active role in the recruitment of students. This activity may take several different forms, including participation in the college's formal recruitment program through the admissions department. It is characteristic of all admissions departments that they never have enough help and the faculty can be of real assistance to them. However, there is a limit as to how much time a faculty member can spend in this activity, and in most institutions it probably should not exceed more than two or three days per year. Only those faculty members who are good at this activity should be called on to help.

Relative to recruitment activities in the high schools, it should be remembered that the action is with the high school teachers at the present time, not with the counselors. It may be much easier for a faculty member to establish rapport with the high school teacher than for the admissions officer to do so. The faculty member should also be able to give a better description of the college's science program

than can the admissions representative. The faculty member is well advised to concentrate his discussions and opinions on the teaching aspects of the program of the college, rather than the other activities involved in campus life.

When faculty members are involved in recruiting activities it is well to have them meet with the admissions personnel to see that they are well informed. Interestingly enough, they are often poorly informed, so it is absolutely essential that they know all of the main facts about the college. It may be useful for the admissions people to present to this faculty group a list of the 25 most uncomfortable questions they may be asked, and conduct a skull session dealing with the best answers to these questions. It has been found that unless such an effort is made faculty are prone to give the wrong answers. Similarly, the technique of conducting a high school visit is not intuitively obvious and takes a certain amount of training. The admissions people should be responsible for conducting such training and for polishing the show.

Direct Recruiting

The department may find it useful to carry on its own recruiting program. If so, it will be necessary to train a recruiting force and to keep it involved. At the present

time it is more necessary than ever that the science departments take an active role in recruiting; they cannot rely entirely on the admissions office if they hope to acquire an adequate number of qualified majors. Each faculty member should be on the lookout for specific ideas as to how enrollment and quality may be sustained or increased. Some programs which have proved effective are:

- A high school subject proficiency contest. This may involve the administration of a nationally-prepared test or one prepared by the members of the department. Various students may be invited to the campus on a given day to take the test while students at greater distances may have the examination administered by the teachers in their high schools. Such a contest may include a prize which could take the form of a college scholarship or other form of recognition. On the day of the contest it is often useful to invite the student's high school teacher to the campus and, in a separate session, work through the examination in some detail. This serves as a learning experience for the high school teacher and also prepares him for questions the student

may raise on return to the high school campus. The occasion of such a visit is an excellent time to introduce the high school teacher to the faculty and the facilities of the college.

- The department members may give lectures to high school classes or clubs. Such lectures should be very carefully designed and prepared at the proper level.
- The department's students may also be involved in lectures to high school clubs, particularly when they are graduates of those institutions. If this is done it is useful to have the student preview his lecture to the entire departmental faculty to see that everything is in order. Only those students who are good at this sort of thing and who have a positive approach should be selected for such an assignment.
- The college faculty members may take an active part in various professional organizations in which high school teachers also participate.
- Faculty may be encouraged to publish in journals read by high school teachers.
- Certain high school teachers may be encouraged

to select promising students to visit the campus on a weekend with the teachers to attend a problem session or to hear an outstanding speaker.

- Various workshops for high school and junior college teachers on the campus are effective vehicles for acquainting these teachers with the college program.
- A science symposium may be held on the campus, with high school principals being asked to notify their students of the topic of the symposium and to select from among them one or several to enter papers. It is possible to design such a symposium in the form of a contest with a prize to encourage participation.
- The faculty should not overlook the opportunity to make itself and its institution known to elementary school students since there is evidence that many scientists make the decision to enter science careers at this early level.

It is important that the department chairman remember that he cannot wait for the admissions department to act.

He must get himself and his faculty involved. The chairman should expect a certain amount of faculty objection to participation in the admission aspect of the college program, but it is probably fair to point out that if they do not make this a part of their job, they may very well find that they have no job to do!

Other Recruiting Activities

Other faculty activities which may be of assistance both to the admissions and the development offices include:

- Visiting alumni and alumni groups when traveling to other areas of the country.
- Encouraging and assisting students in visiting alumni and alumni groups during their travels, particularly during vacation periods.
- When a student who is interested in a certain discipline has visited the campus a follow-up letter may be sent to him with general information on the department's programs as well as a few pertinent comments relating to any discussion which was held during the visit. This may be a pre-prepared letter and the admissions department should be ready to send these out on notice.

In this case, however, it is vitally important that the chairman be given a record of who is contacted so that he will not be embarrassed if future contact is made with this prospective student.

- Take advantage of the fact that the private liberal arts college is small and should be personal. This is important both in correspondence and in campus visits.
- When possible, involve local area students in the research activities of the department.
- Help high school teachers with their laboratory and lecture problems. Many times it will be of real assistance to make available certain pieces of equipment or films owned by the college.
- Identify the better students and become acquainted with their high school teachers.
- Be sure the high school teachers and the high school counselors know the important contribution to education which is made by the liberal arts colleges.

Several studies have been made on the origin of science majors, as well as the baccalaureate origin of Ph.D. candidates,

and these should be familiar to all faculty members. Current data indicate that a third of all the Ph.D.'s in chemistry received their undergraduate education in liberal arts colleges. This proportion, which has remained constant over the years, is well in excess of the ratio of students attending such institutions.

If the members of the science department have not been involved in the past with the problem of admissions, it might be well for the chairman to schedule a special meeting where the only topic that will be discussed is, "Why should students come to this department?"

THE CHANGING ROLE OF THE DEPARTMENT

This is a time of crisis for private higher education, both in terms of financial stability and in its position of leadership in education. A good deal of this crisis comes about from the change in the student population. Years ago many colleges tended to be populated by a rather homogeneous group of students who looked alike, came from similar families, and thought similarly. These generalizations do not appear to be nearly as true today, yet the colleges and education have not changed that much. Some change does appear to be in order.

There is not necessarily a need for the presentation of different information, but rather the manner in which the information is packaged. There are a number of people who feel a need for a more interdisciplinary approach to the course

offerings. Educational institutions must plan to cope with a wider variety of students and wider range of needed information. This suggests that some reshaping of the college community may be in order. The economic feasibility is an important factor in any such changes.

New Approaches in Education

One direction this change is observed to be taking in certain institutions is in a divisional as opposed to a departmental approach to teaching. Thus, some emphasis is being placed on the development of subject modules as opposed to new courses.

Some financial support is available for experimentation in new approaches to education but, because of a limited number of dollars, any such application requires very strong evidence of the fertility of the approach. Generally speaking, funds are available for projects which propose different approaches as opposed to a continuation of an ongoing program or the copying of programs existing elsewhere.

Many education specialists perceive a need at the present time for less specialization and a broader preparation which will allow the individual to consider a problem from a variety of different approaches. There is a need for the inexperienced

student to have an opportunity to work with the experienced investigator, and this suggests that more responsibility be shifted to the shoulders of the students. Thus there is a need for more student-centered rather than teacher- or content-centered approaches to education.

Intrainstitutional Cooperation

Intrainstitutional cooperation may also be necessary in the future in order to keep the academic offerings of colleges viable. One such experiment involves an educational TV network where a two-way system has been installed in each of several institutions so that faculty and students can interact both verbally and visually with those at other locations. Courses are given live at one institution and students in the institutions receiving the course can react instantly with the lecturer through the two-way setup.

Other examples of intrainstitutional cooperation can be cited but, unfortunately, this type of cooperation has not been investigated as extensively as one might hope. Interestingly enough, many institutions are simply eliminating departments judged to be "inefficient" without investigating various avenues which might guarantee their survival and usefulness.

There is a need at the present time for active investigation of the viability of autonomous academic departments. Creative experimentation in interdepartmental cooperation, both within the college and among institutions, would certainly be welcome.

AIDS TO THE NEW CHAIRMAN

Perhaps the principal role of the department chairman is to see that all of the activities of the department are "gruntling" activities as opposed to "disgruntling" ones. In order to guarantee a maximum degree of "gruntling," it is necessary for the department chairman to have firm control of the environment. To do this he must learn to make the maximum use of the time he has available. A department chairman has a special need to develop this skill. Perhaps it would be appropriate to have a sign over the chairman's desk reiterating the quotation of George Bernard Shaw: "Most of us operate in this lifetime as if we are just getting ready for the next time around."

Making Decisions

The department chairman, then, has a need to get organized, and this implies that he must learn to know himself better. He must know whether he is a fast or a slow decision maker and how this affects his actions with others. A department chairman should study the way in which he makes decisions; once he knows this, he will be able to enhance his effectiveness with others.

Some individuals are slow decision makers and find it convenient to introduce a topic under consideration casually two or three different times over an extended period. They may find that this delayed procedure assists them in considering all aspects of the problem, as well as its impact on the entire college situation, and through this vehicle they may be enabled to make better decisions. Others find that they would rather have all the facts presented to them and then make a decision based on these facts as rapidly as possible. Each individual will have his own method of operating, but certainly he should be familiar with how and why he operates in this fashion.

In a similar fashion, it is important to understand the mechanism by which the individual prefers to relate to others, that is, how he prefers to get his way. Some prefer to do

this from their position of authority, adopting a legalistic point of control. Such an individual may be result-oriented and may base an action on productivity. Others may prefer to get results through persuasion. Some may prefer to operate through the systems approach by establishing processes, time tables, accurate records, etc. Still others prefer to obtain results through the use of ideas, talking to colleagues on the basis of creativity, drawing out their suggestions. Each of these skills may be effective and the method used must be one in which the chairman can feel comfortable.

In conducting the affairs of the department it is advantageous to remove as far as possible the decision-making and the legislative aspects of the chairman's duties from the planning stage of operating a department. It is advantageous to involve students in a serious manner in the planning stage of the department's activities. Some departments find it desirable to initiate a science executive council composed of students elected by the various classes. This council may share in responsibilities of reaching departmental decisions as well as in the planning stage of the department's program. Thus, they may be involved in the use of resources, in faculty recruitment as well as student recruitment, and in curriculum changes. The presence of such a council, or some

other means of student involvement, may have a very positive effect on the members of the science faculty since it is found that the faculty will often react in a different way in the presence of students. Faculty are generally more flexible and more open to persuasion in the presence of students. All cases of student involvement must be serious, with the students given real responsibility.

It is advisable to get the student and faculty group together at a time and place in which they are freed from other activities. Such meetings may be scheduled during the summer at a location which will be relaxing and conducive to constructive discussions, or may be held during vacation periods, or even possibly over weekends. If the students are convinced that they have a real responsibility in the decision-making activities of the department, they will be willing to sacrifice their free time for such meetings.

Perhaps the most difficult task faced by any individual in authority is that of decision-making. When a decision must be reached it is often best to get all of the conditions relative to making the decision down on paper in an organized fashion. This assists the administrator in organizing his thoughts and allows him not only to look for the strengths of the situation but also for the weaknesses. If after this is

done a decision is not clear or obvious, perhaps the time is not yet appropriate for making it and more information must be obtained.

When a decision must be reached which affects a group of people, it is often desirable for the administrator to send a note to members of the group outlining his thinking on the topic under consideration and notifying them of his proposed decision, along with the request that if they have any objections they respond promptly. If no objections are obtained after two or three days, the chairman can feel free to act accordingly, but he now has the security of knowing that all of the members of the group were notified in advance of the situation and were given the opportunity to respond. This will tend to assure him of greater cooperation.

Student-vs.-Faculty Conflicts

The department chairman and the members of the faculty must be prepared today to be at the center of the battleground of student protest. There is every reason to suspect that the time of student-vs.-administrator protest may have passed and that the critical issue now may be student-vs.-faculty. Students are very much concerned with relevance at the present time and the faculty must be prepared to persuade them of

the value of the various elements of the educational process, including the value of abstract thought, of the liberal arts in general and of the historic approach to learning. To this end it may be convenient to have a well-placed bulletin board in which items of interest to these topics may be posted.

But it is important for faculty members to be aware that academic administrators have now learned to sway with the students' concerns as well as to be convincing. The students now appear to be going back to the faculty with their concern and the faculty must be ready to defend its positions.

One of the real serious questions which will probably be asked of the faculty by students is, "Why should I pay the cost of going to your class?" If the faculty member cannot offer a convincing answer, he and his department may be in trouble.

One of the first things which should be undertaken by a new chairman involves taking a critical look at the particular institution as well as the particular department structure, with an eye to seeing whether the structure as it has operated in the past has been efficient as well as relevant.

Encouraging Creative Activity

It is of utmost importance that the department chairman

encourage creative activities. In order to do this it is advantageous to have available a discretionary fund so that promising ideas not previously programmed into the budget can be tested as they occur. Such funds need not be large but they are essential to stimulation of a creative atmosphere.

The effective department chairman is not only one who is able to take a positive approach to a problem but one who surrounds himself with other creative people, and especially those who differ in their approach from his own. It is important that the chairman not surround himself with people who are just like himself.

One of the principal responsibilities of the department chairman is to identify and prepare a successor to himself. It should be remembered that the position is not one which goes on forever. Once the successor is identified, he should be given the encouragement of responsibilities and credit for accomplishments. But the chairman must be there at all times to give skillfully advice and guidance when needed.

Some of the decisions the chairman is faced with will be hard ones dealing with other human beings. In these cases it may be wise to seek the assistance of others, particularly the dean and president, and to be willing to accept advice.

In order for this to be of value, it is necessary that the chairman keep the administrative officers of the college notified of the various aspects of the department's activities, its needs as well as its strengths and weaknesses.

The department chairman should seek the help of, and offer his help to, the other administrative officers of the college -- the public relations director, admissions and development officers. All of them have something to offer to the department and, at the same time, have a great need for the department's assistance.

The chairman shouldn't be discouraged with the failures which will come along from time to time. If everything seems to work, it is an indication that the department did not plan enough.

Of the various levels making up the college the single most important and strongest element is, and should be, the faculty and its leaders. As the head of the department, the chairman thus is of utmost importance to the success or failure of the institution.

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